

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Guillermo ALVAREZ et al.

Confirmation No.: 5866

Application No.: 09/865,999

Examiner: William D THOMSON

Filing Date: 05/25/2001

Group Art Unit: 2123

Title: Method and Apparatus for Predicting Multi-Part Performability

Mail Stop Amendment
Commissioner for Patents
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Alexandria, VA 22313-1450

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Sir:

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- () under 37 CFR 1.97(b), or
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- (X) under 37 CFR 1.97 (c) together with either a:
 - () Statement under 37 CFR 1.97(e), or
 - (X) a \$180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
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 - () Statement under 37 CFR 1.97(e)(1) or (2), and
 - () a \$180.00 fee set forth in 37 CFR 1.17(p).
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Please charge to Deposit Account **08-2025** the sum of \$180.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **08-2025** pursuant to 37 CFR 1.25.

(X) Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Statement together with any required copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

() A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

(X) I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450. Date of Deposit: 01/13/2005

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Respectfully submitted,

Guillermo ALVAREZ et al.

By 

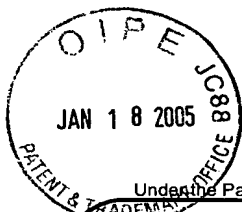
Derek J. WESTBERG

Attorney/Agent for Applicant(s)

Reg. No. **40,872**

Date: **01/13/2005**

Telephone No.: **(408) 293-9000**



PTO/SB/08B (08-03)

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

| | | |
|---|-------------------------------|--------------------|
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | Application Number | 09/865,999 |
| | Filing Date | May 25, 2001 |
| | First Named Inventor | Guillermo ALVAREZ |
| | Art Unit | 2123 |
| | Examiner Name | William D. THOMSON |
| | Attorney Docket Number | 10003525-1 |

| | | | |
|-------|---|----|---|
| Sheet | 1 | of | 2 |
|-------|---|----|---|

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|-----------------------|--------------------------|---|----------------|
| | 1A | Guillermo A. ALVAREZ et al., Declustered Disk Array Architectures with Optimal and Near-optimal Parallelism, Proc. of the 25th Annual ACM/IEEE Symposium on Computer Architecture, 1998, pp. 109-120, IEEE Computer Society, Washington DC. | |
| | 1B | Guillermo A. ALVAREZ et al., Efficient verification of performability guarantees, Fifth International Workshop on Performability Modeling of Computer and Communication Systems, September 2001, Erlangen, Germany, . | |
| | 1C | Scott A. BARNETT et al., Performability of disk-array-based video servers, Multimedia Systems, 1998, 6:60-74, Springer-Verlag, Berlin, Germany. | |
| | 1D | Ing-Ray CHEN, Effect of Probabilistic Error Checking Procedures on Performability of Robust Objects, Proceedings of the 1993 ACM/SIGAPP Symposium on Applied Computing: States of the Art and Practice, 1993, pp. 677 - 681, ACM Press, New York, NY. | |
| | 1E | S. M. Rezaul ISLAM, Performability Analysis of Disk Arrays, Proceedings of the 36th Midwest Symposium on Circuits and Systems, 1993, IEEE, New York, NY. | |
| | 1F | Edward K. LEE et al., An Analytic Performance Model of Disk Arrays, Proceedings of the 1993 ACM SIGMETRICS Conference on Measurement and Modeling of Computer Systems, 1993, pp. 98 - 109, ACM Press, New York, NY. | |
| | 1G | Arif MERCHANT et al., Analytic Modeling of Clustered RAID with Mapping Based on Nearly Random Permutation, IEEE Transactions on Computers, 1996, Vol. 45, No. 3, pp. 367-373, IEEE Computer Society, Washington DC. | |
| | 1H | Arif MERCHANT et al., Disk Array Models in Minerva, HP Labs Technical Report, HPL-2001-118, May 15, 2001, Hewlett-Packard, Palo-Alto, CA. | |
| | 1I | David A. PATTERSON et al., A Case for Redundant Arrays of Inexpensive Disks (RAID), Proceedings of the 1988 ACM SIGMOD International Conference on Management of Data, 1988, pp. 109-116, ACM Press, New York, NY. | |
| | 1J | Alexander THOMASIAN et al., Performance Analysis of RAID5 Disk Arrays with a Vacationing Server Model for Rebuild Mode Operation, Proceedings of the Tenth International Conference on Data Engineering, 1994, pp. 111 - 119, IEEE Computer Society, Washington DC. | |

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| Examiner Signature | | Date Considered | |
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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| | | | First Named Inventor | Guillermo ALVAREZ | |
| | | | Art Unit | 2123 | |
| | | | Examiner Name | William D. THOMSON | |
| Attorney Docket Number | 10003525-1 | | | | |
| Sheet | 2 | of | 2 | | |

| NON PATENT LITERATURE DOCUMENTS | | | |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | 2A | Alexander THOMASIAN et al., RAID5 Performance with Distributed Sparing, IEEE Transactions on Parallel and Distributed Systems, 1997, Vol. 8, No. 6, pp. 640-657, IEEE Computer Society, Washington DC. | |
| | 2B | Alexander THOMASIAN, RAID5 Disk Arrays and their Performance Analysis, Recovery Mechanisms in Database Systems, 1997, Chapter 37, Prentice-Hall, Upper Saddle River, NJ. | |
| | 2C | John WILKES et al., Specifying data availability in multi-device file systems, Technical Report HPL-CSP-90-6, 1990, Hewlett-Packard, Palo Alto, CA. | |
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